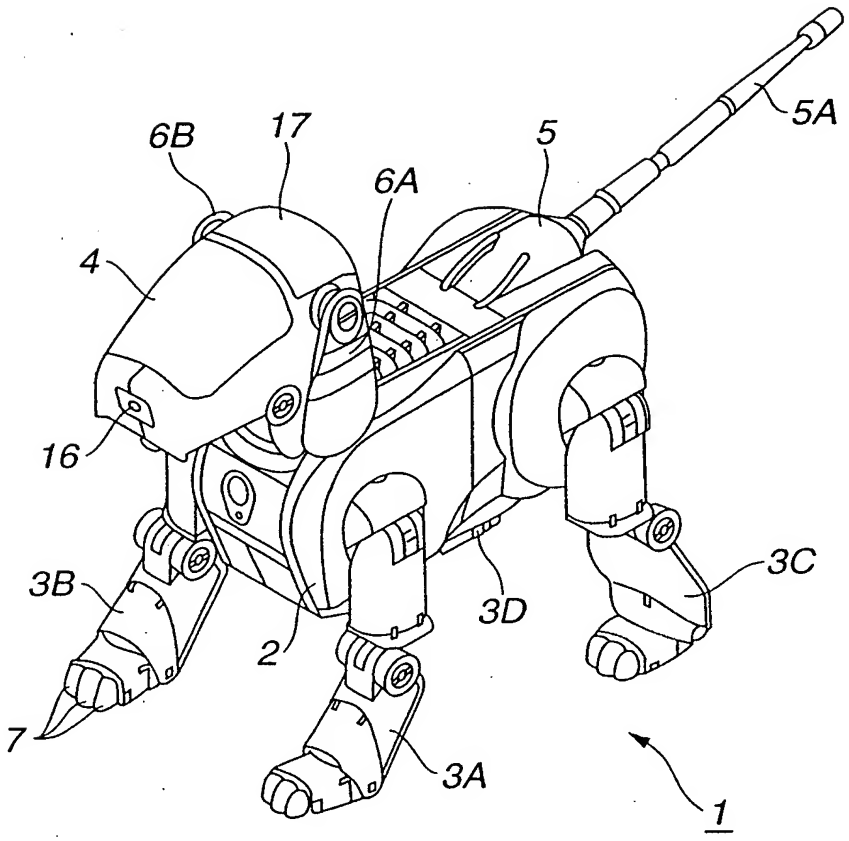


FIG.1

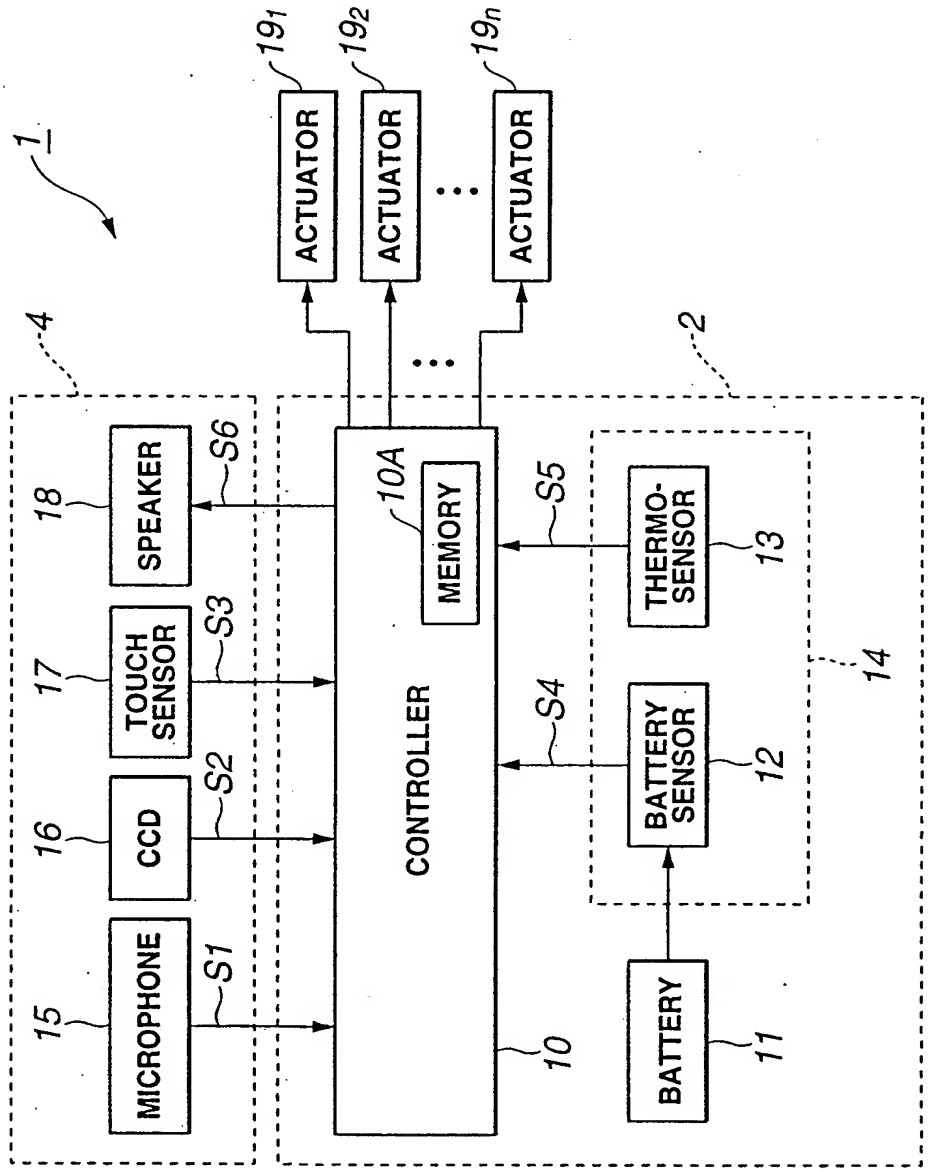

1
4
2
19_1
19_2
19_n
ACTUATOR
ACTUATOR
ACTUATOR
18
SPEAKER
S6
17
TOUCH SENSOR
S3
16
CCD
S2
15
MICROPHONE
S1
10A
MEMORY
CONTROLLER
10
S5
S4
THERMO-SENSOR
13
BATTERY SENSOR
12
14
BATTERY
11

FIG.2

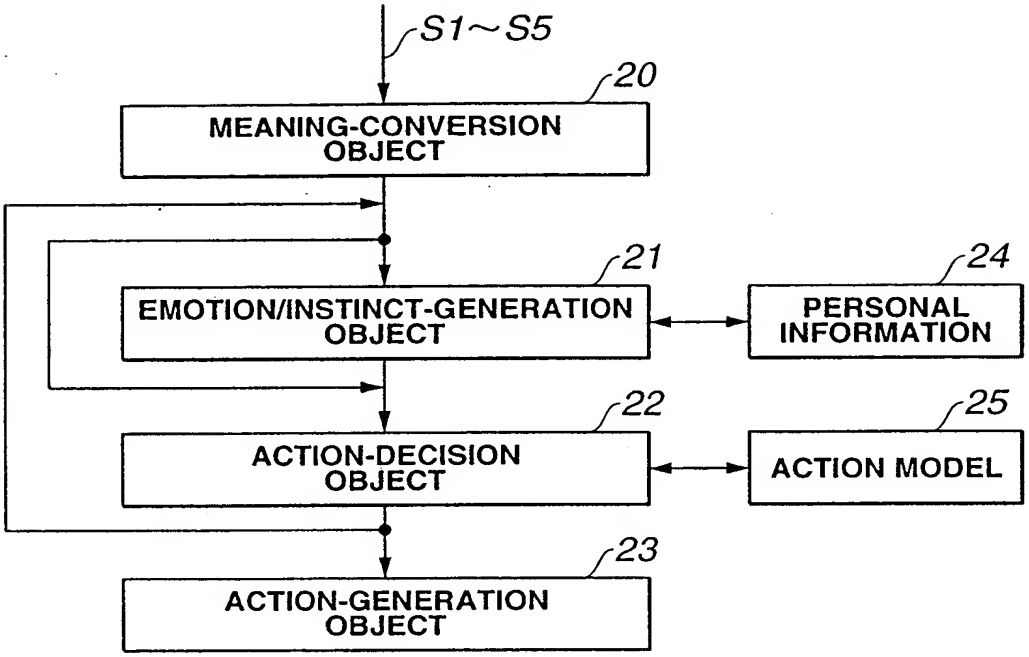

S1~S5
20
MEANING-CONVERSION OBJECT
21
EMOTION/INSTINCT-GENERATION OBJECT
24
PERSONAL INFORMATION
22
ACTION-DECISION OBJECT
25
ACTION MODEL
23
ACTION-GENERATION OBJECT

FIG.3

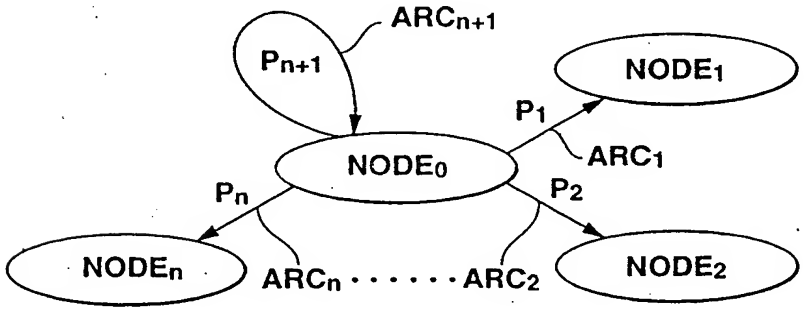

ARCn+1
Pn+1
NODE1
P1
ARC1
NODE0
Pn
P2
NODEn
ARCn · · · · · · ARC2
NODE2

FIG.4

NODE100

NODE120

NODE 100	INPUT EVENT NAME	DATA NAME	DATA RANGE	PROBABILITY OF TRANSITION TO OTHER NODE (Di)					
TRANSITION DESTINATION NODE				NODE 120	NODE 120	NODE 1000			NODE 600
OUTPUT ACTION				ACTION 1	ACTION 2	MOVE BACK			ACTION 4
1	BALL	SIZE	0, 1000	30%					
2	PAT				40%				
3	HIT				20%				
4	MOTION					50%			
5	OBSTACLE	DISTANCE	0, 100			100%			
6		JOY	50, 100						
7		SURPRISE	50, 100						
8		SADNESS	50, 100						

26

FIG.5

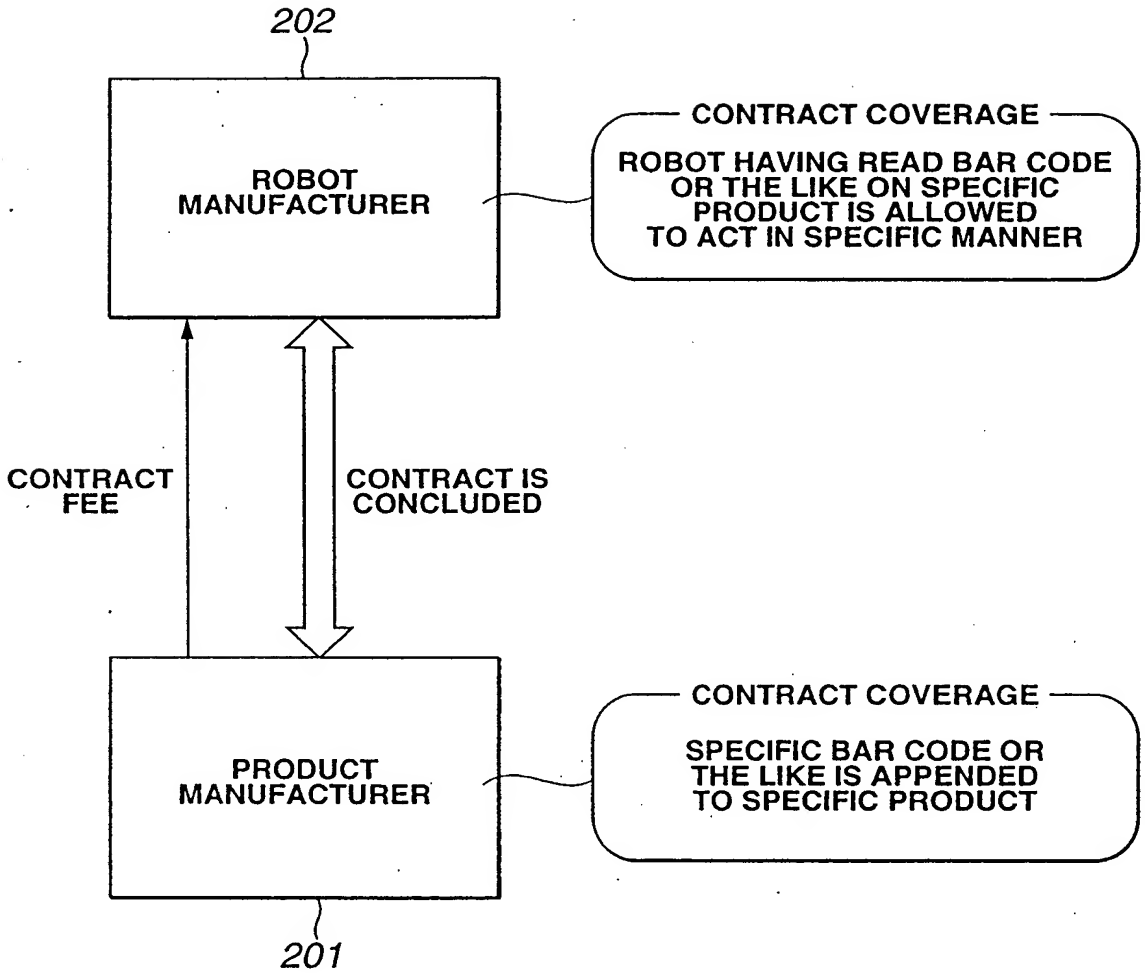

202
ROBOT MANUFACTURER
CONTRACT COVERAGE
ROBOT HAVING READ BAR CODE OR THE LIKE ON SPECIFIC PRODUCT IS ALLOWED TO ACT IN SPECIFIC MANNER
CONTRACT FEE
CONTRACT IS CONCLUDED
PRODUCT MANUFACTURER
CONTRACT COVERAGE
SPECIFIC BAR CODE OR THE LIKE IS APPENDED TO SPECIFIC PRODUCT
201

FIG.6

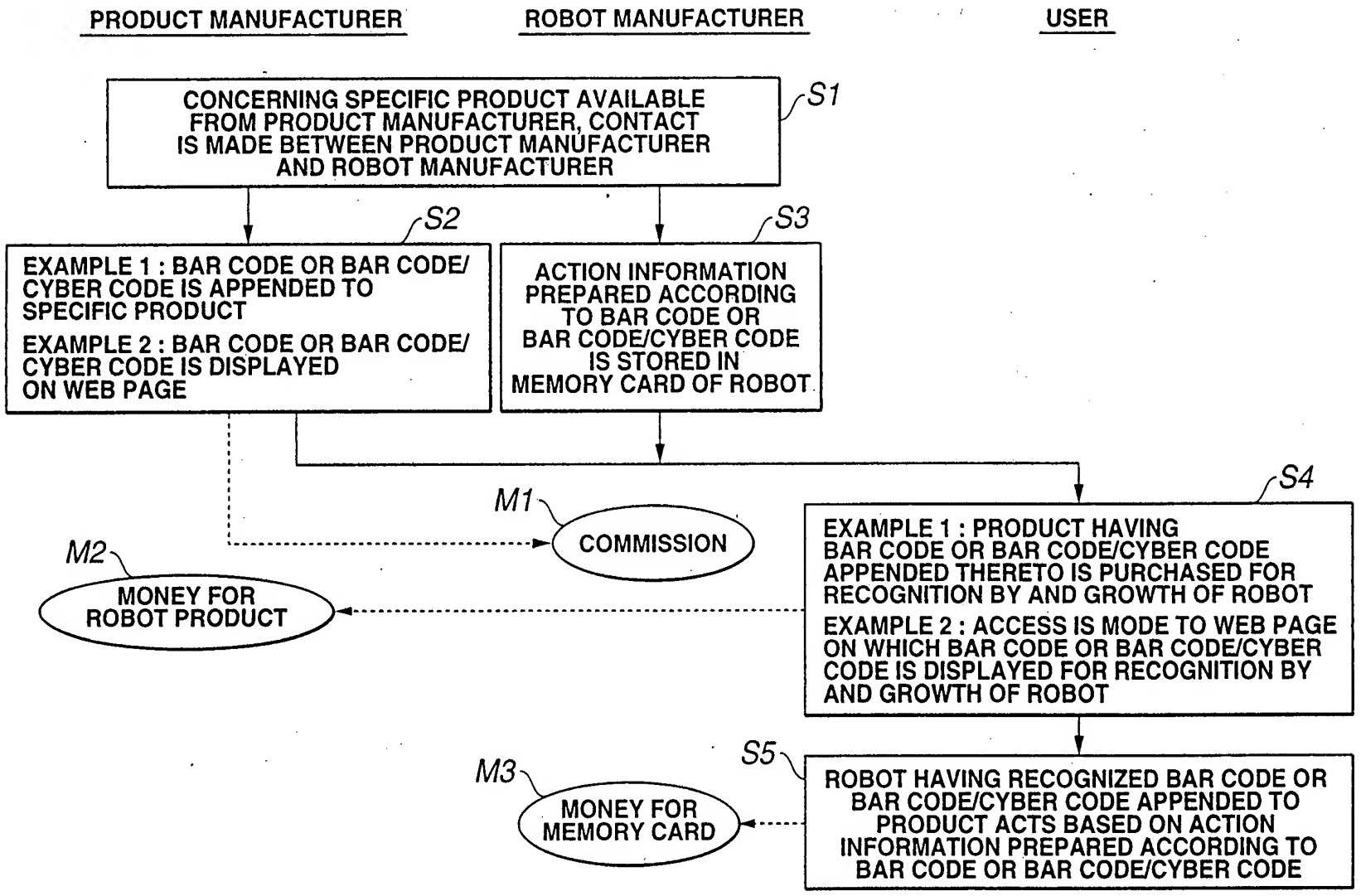

PRODUCT MANUFACTURER
ROBOT MANUFACTURER
USER
CONCERNING SPECIFIC PRODUCT AVAILABLE FROM PRODUCT MANUFACTURER, CONTACT IS MADE BETWEEN PRODUCT MANUFACTURER AND ROBOT MANUFACTURER
S1
S2
EXAMPLE 1 : BAR CODE OR BAR CODE/CYBER CODE IS APPENDED TO SPECIFIC PRODUCT
EXAMPLE 2 : BAR CODE OR BAR CODE/CYBER CODE IS DISPLAYED ON WEB PAGE
S3
ACTION INFORMATION PREPARED ACCORDING TO BAR CODE OR BAR CODE/CYBER CODE IS STORED IN MEMORY CARD OF ROBOT
S4
M1
COMMISSION
M2
MONEY FOR ROBOT PRODUCT
EXAMPLE 1 : PRODUCT HAVING BAR CODE OR BAR CODE/CYBER CODE APPENDED THERETO IS PURCHASED FOR RECOGNITION BY AND GROWTH OF ROBOT
EXAMPLE 2 : ACCESS IS MODE TO WEB PAGE ON WHICH BAR CODE OR BAR CODE/CYBER CODE IS DISPLAYED FOR RECOGNITION BY AND GROWTH OF ROBOT
S5
M3
MONEY FOR MEMORY CARD
ROBOT HAVING RECOGNIZED BAR CODE OR BAR CODE/CYBER CODE APPENDED TO PRODUCT ACTS BASED ON ACTION INFORMATION PREPARED ACCORDING TO BAR CODE OR BAR CODE/CYBER CODE

FIG.7

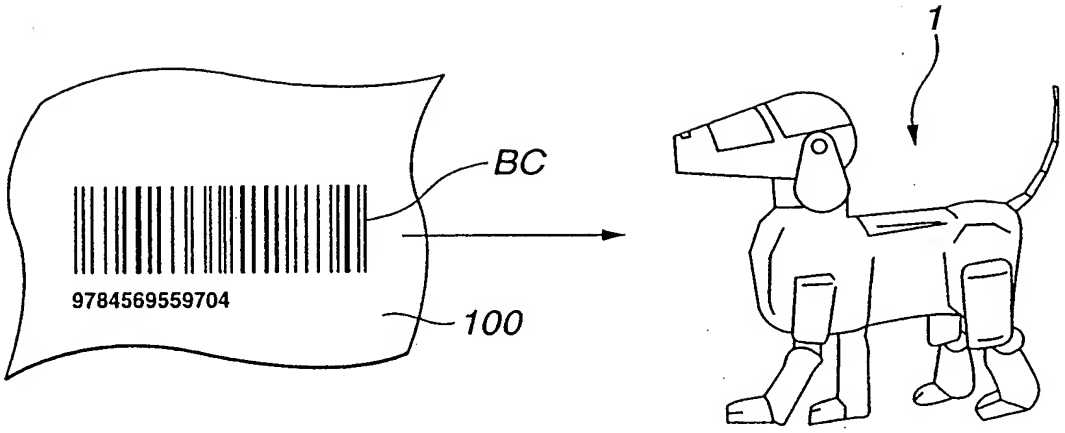

1
BC
9784569559704
100

FIG.8A

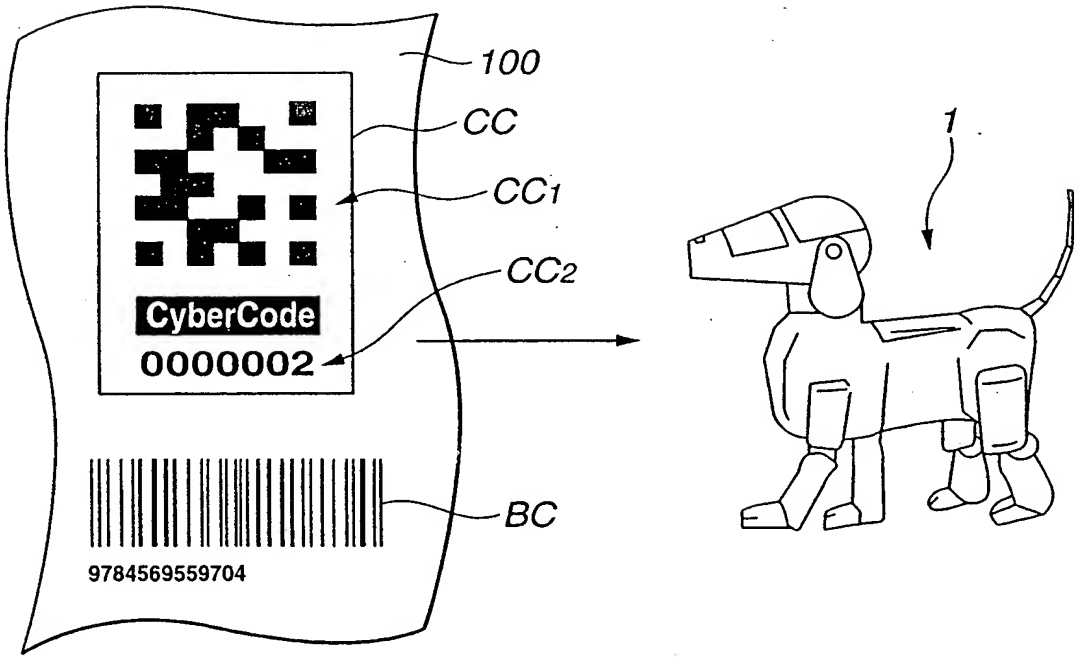

100
CC
CC1
CC2
CyberCode
0000002
1
BC
9784569559704

FIG.8B

FIG.9A

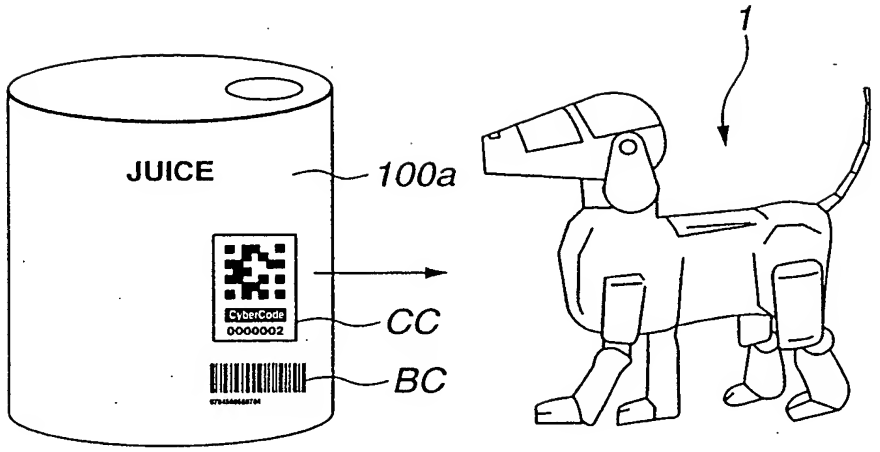


FIG.9B

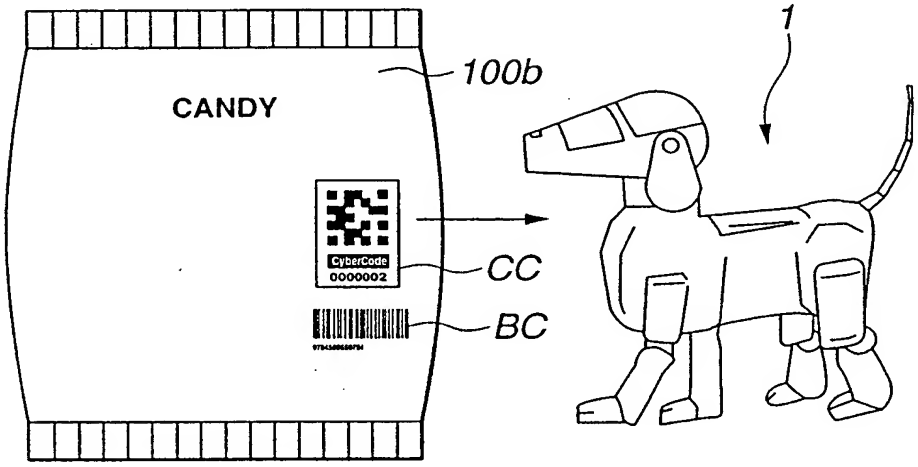
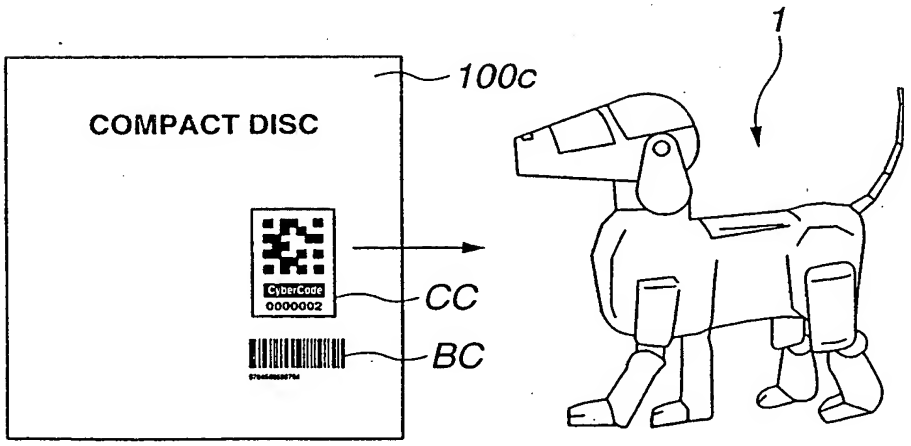


FIG.9C



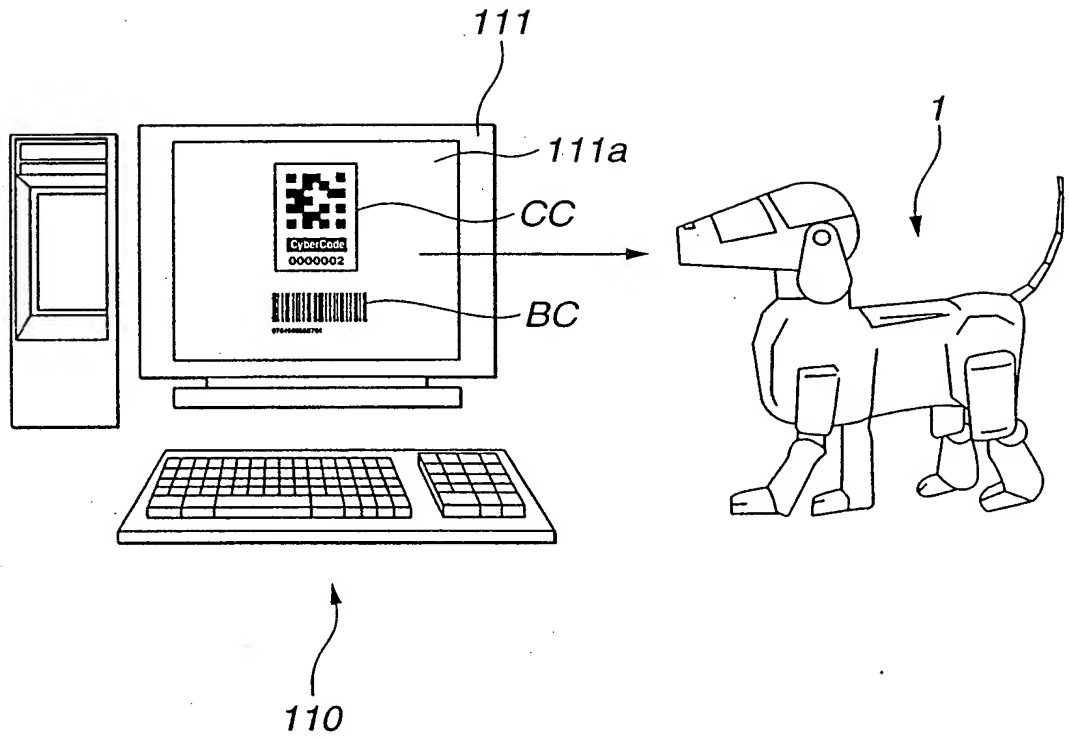


FIG.10

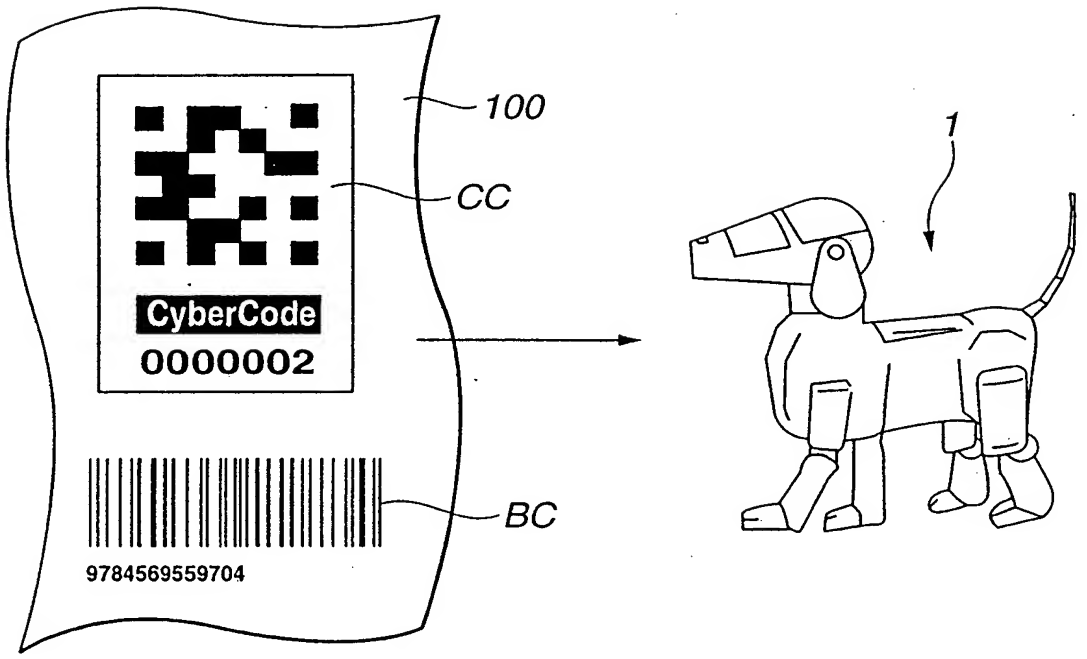


FIG.11A

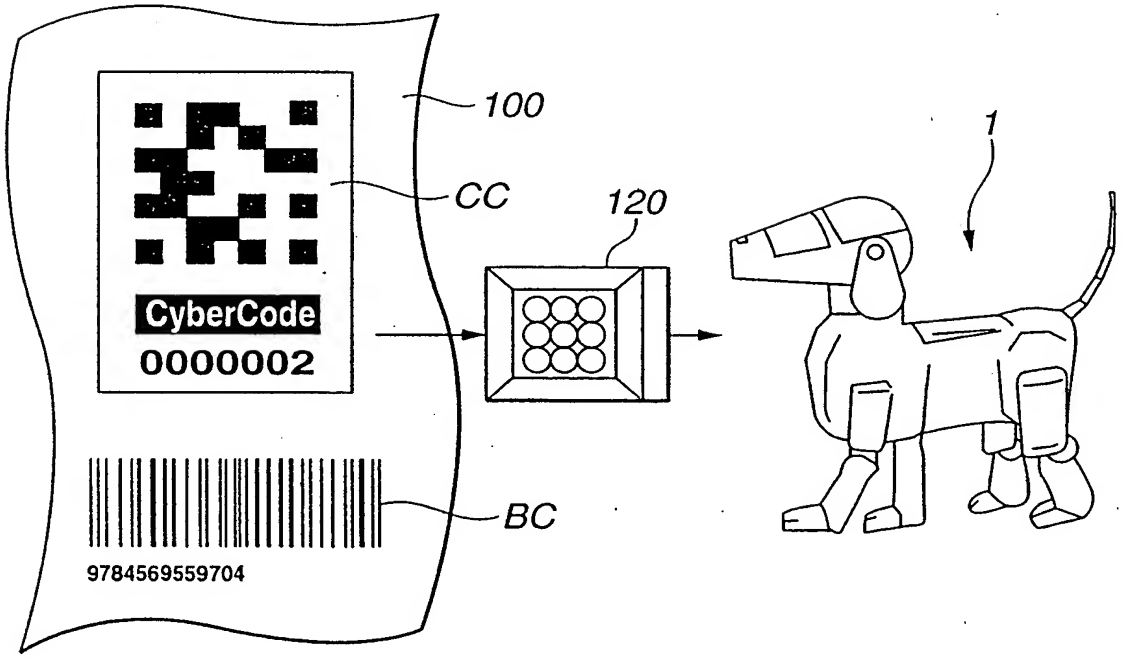


FIG.11B

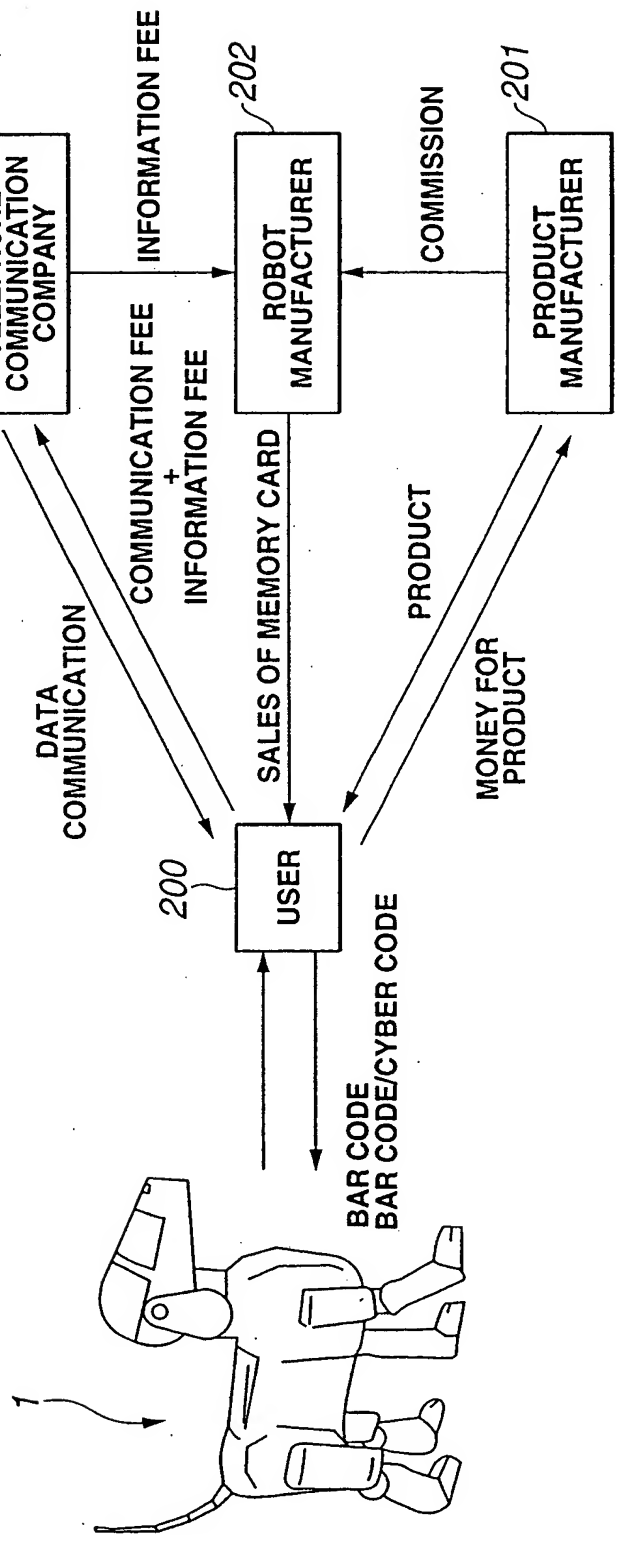

203
TELEPHONE COMMUNICATION COMPANY
INFORMATION FEE
202
ROBOT MANUFACTURER
COMMISSION
201
PRODUCT MANUFACTURER
COMMUNICATION FEE + INFORMATION FEE
SALES OF MEMORY CARD
PRODUCT
DATA COMMUNICATION
MONEY FOR PRODUCT
200
USER
BAR CODE
BAR CODE/CYBER CODE
1

FIG.12

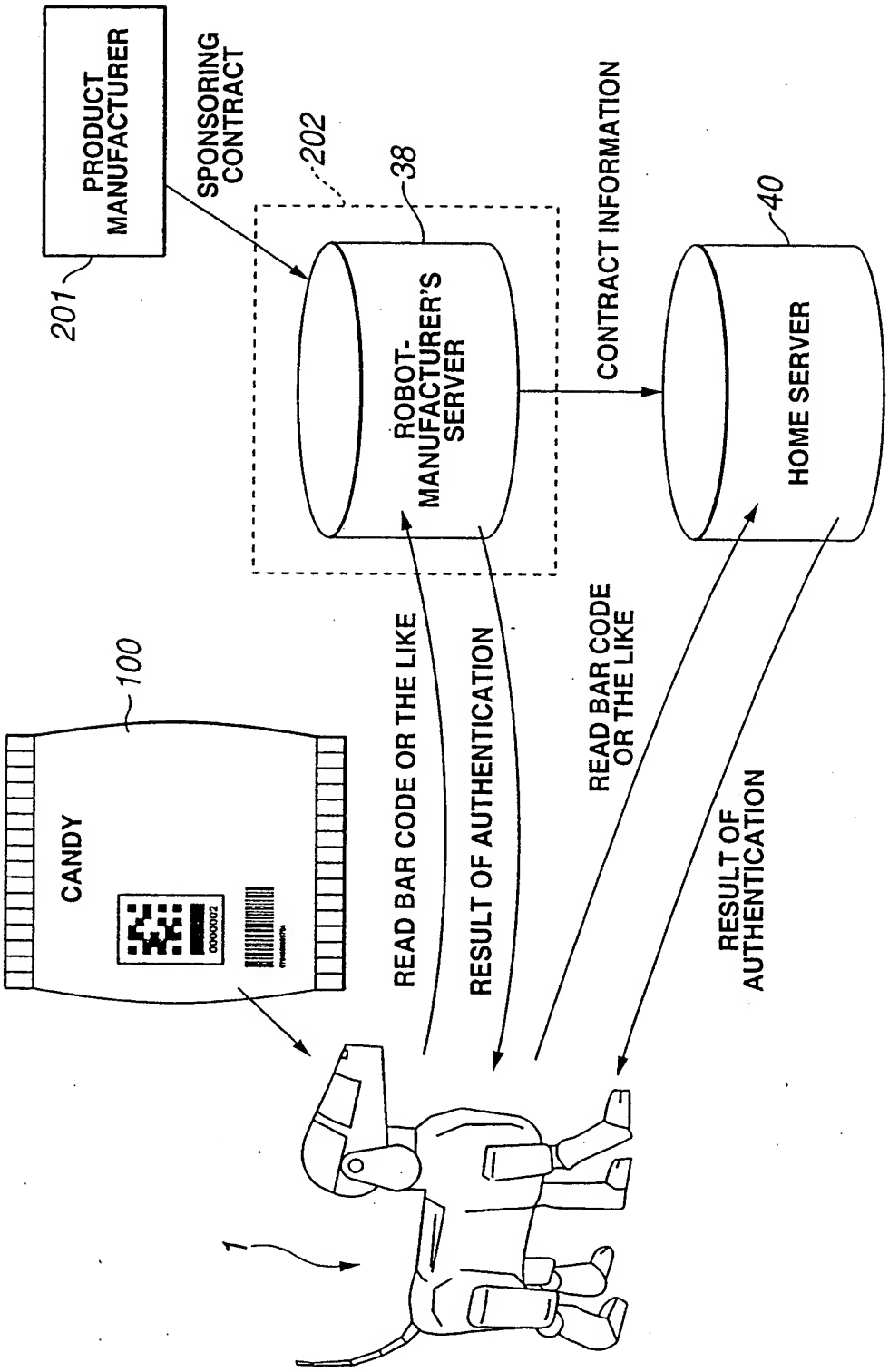

PRODUCT MANUFACTURER
201
SPONSORING CONTRACT
202
38
ROBOT-MANUFACTURER'S SERVER
CONTRACT INFORMATION
40
HOME SERVER
100
CANDY
READ BAR CODE OR THE LIKE
RESULT OF AUTHENTICATION
READ BAR CODE OR THE LIKE
RESULT OF AUTHENTICATION
1

FIG.13

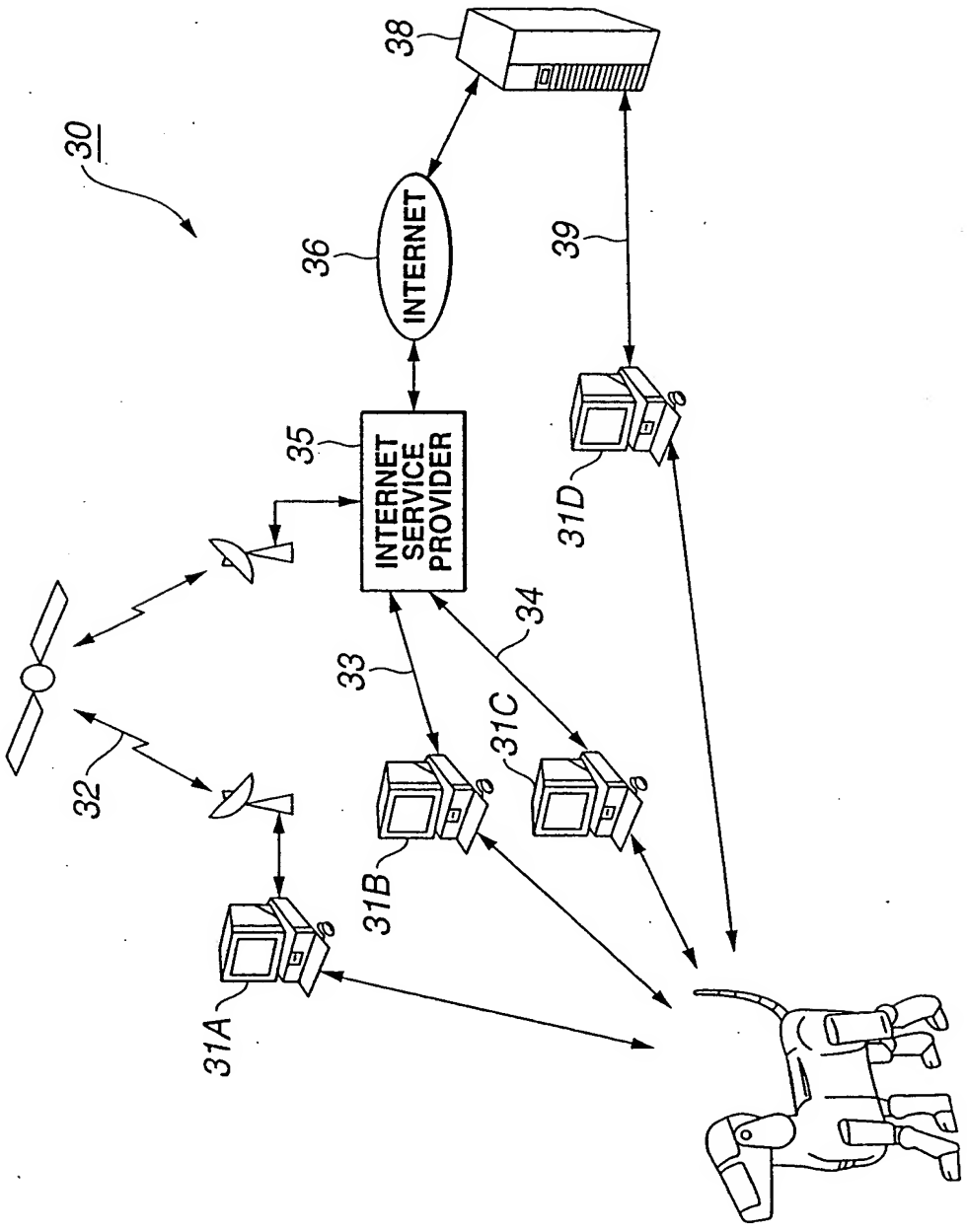

30
38
INTERNET
36
39
35
INTERNET SERVICE PROVIDER
31D
34
33
31C
32
31B
31A

FIG.14

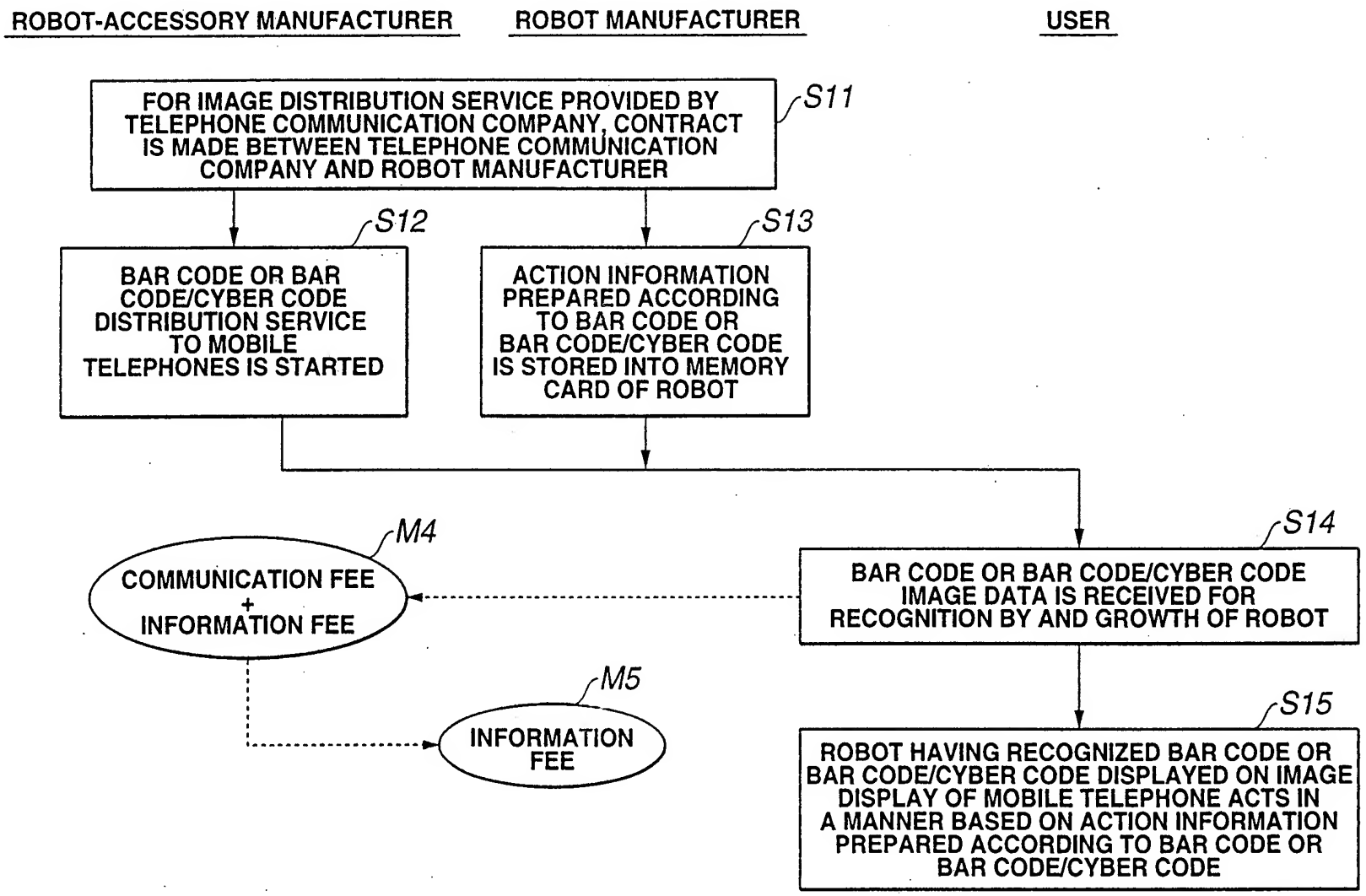

ROBOT-ACCESSORY MANUFACTURER
ROBOT MANUFACTURER
USER
FOR IMAGE DISTRIBUTION SERVICE PROVIDED BY TELEPHONE COMMUNICATION COMPANY, CONTRACT IS MADE BETWEEN TELEPHONE COMMUNICATION COMPANY AND ROBOT MANUFACTURER
S11
S12
BAR CODE OR BAR CODE/CYBER CODE DISTRIBUTION SERVICE TO MOBILE TELEPHONES IS STARTED
S13
ACTION INFORMATION PREPARED ACCORDING TO BAR CODE OR BAR CODE/CYBER CODE IS STORED INTO MEMORY CARD OF ROBOT
M4
COMMUNICATION FEE + INFORMATION FEE
S14
BAR CODE OR BAR CODE/CYBER CODE IMAGE DATA IS RECEIVED FOR RECOGNITION BY AND GROWTH OF ROBOT
M5
INFORMATION FEE
S15
ROBOT HAVING RECOGNIZED BAR CODE OR BAR CODE/CYBER CODE DISPLAYED ON IMAGE DISPLAY OF MOBILE TELEPHONE ACTS IN A MANNER BASED ON ACTION INFORMATION PREPARED ACCORDING TO BAR CODE OR BAR CODE/CYBER CODE

FIG.15

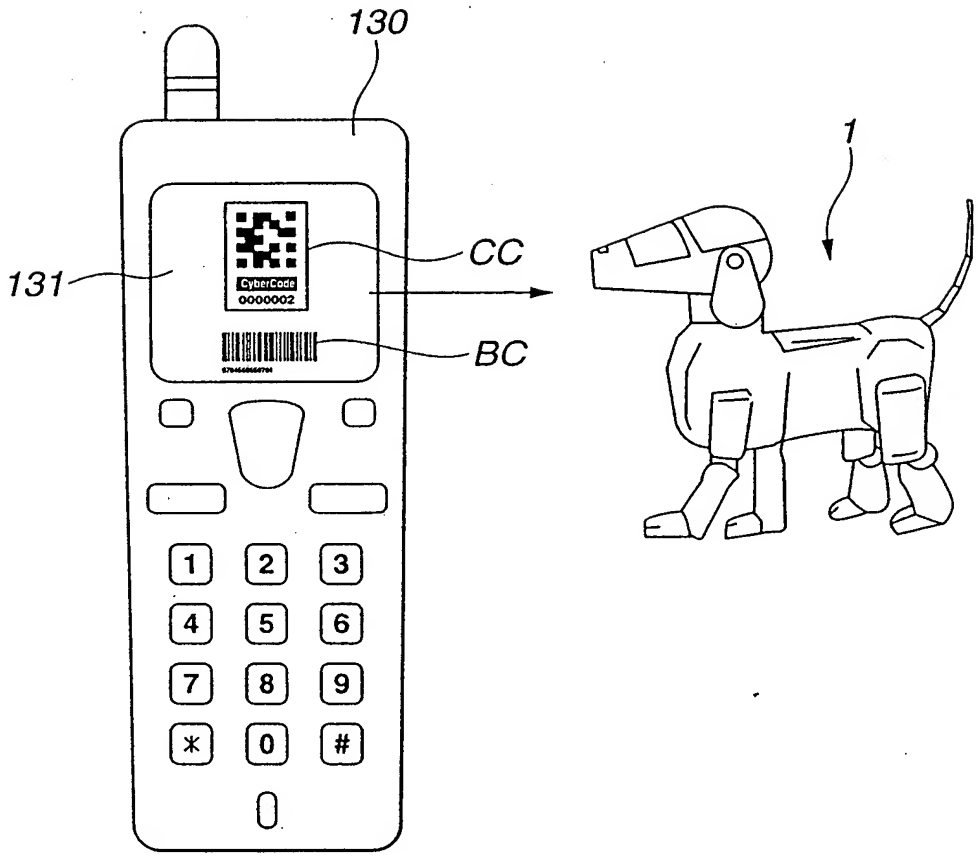


FIG.16

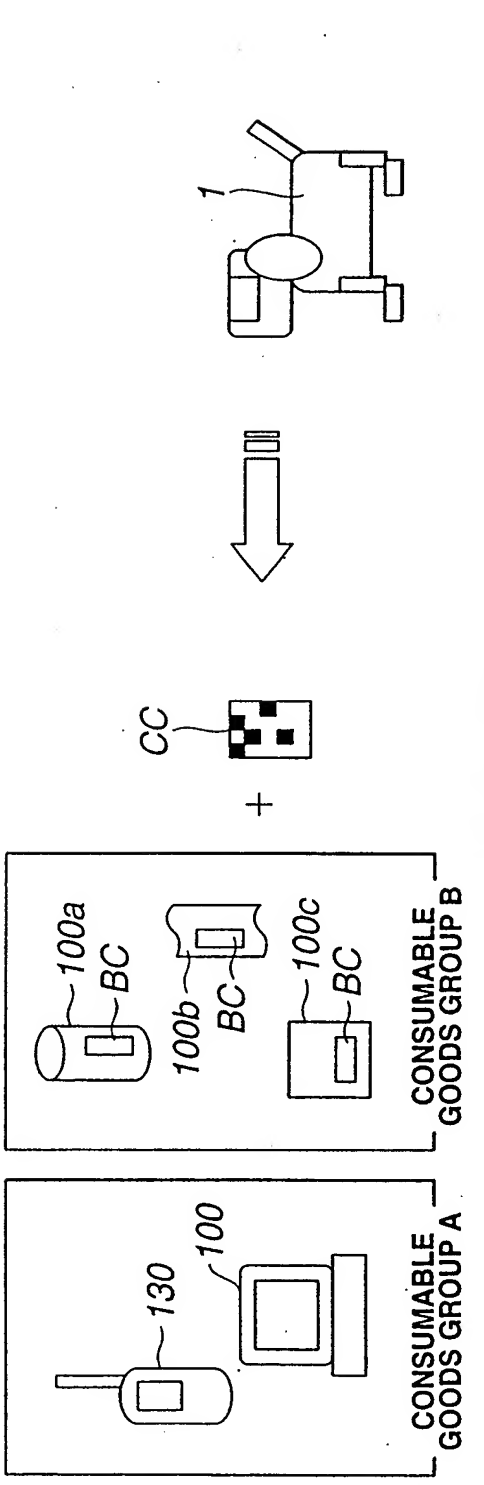


FIG.17A

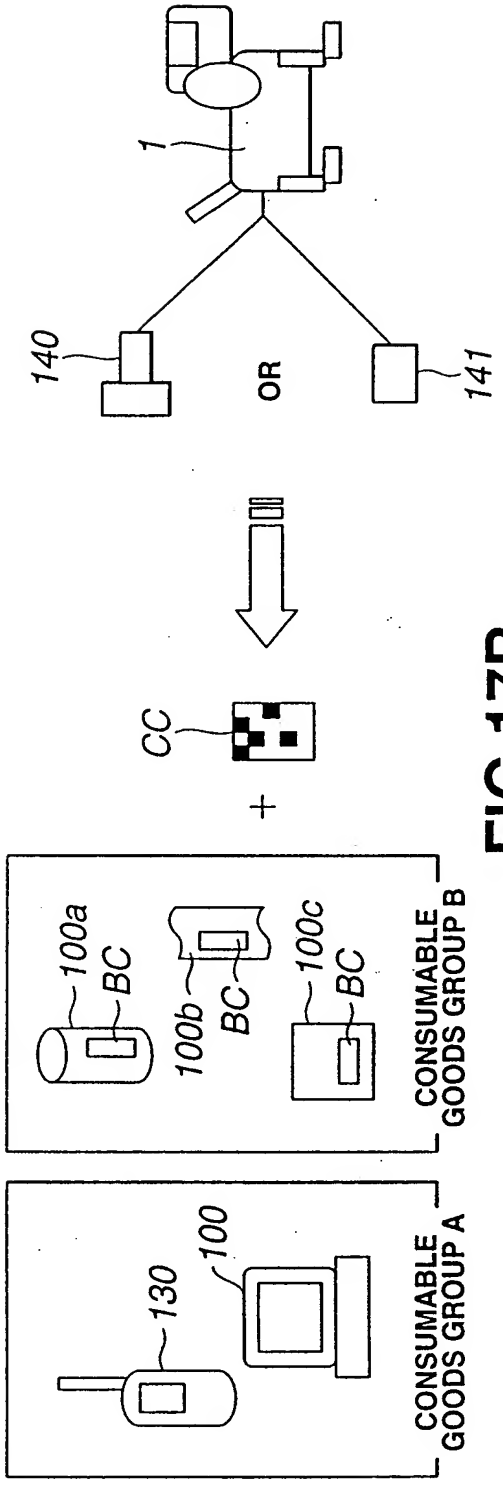


FIG.17B